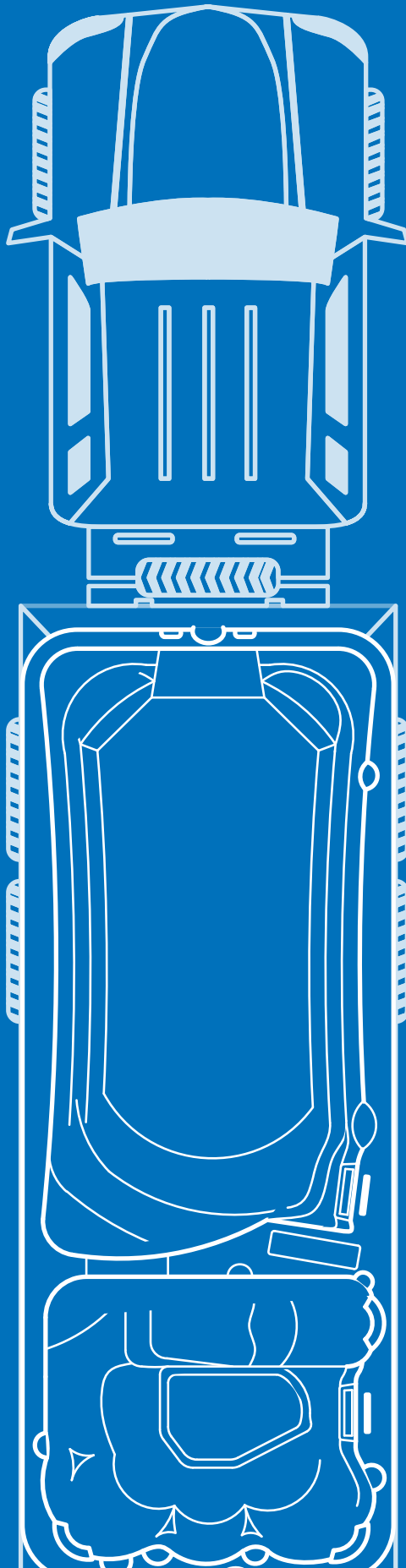


Swim Spa Pre-delivery Guide



Vortex Spas



Hello!

This document is designed to provide all the information you need to ensure the smooth delivery and installation of your spa or swim spa.

Please read it carefully and talk to your sales person immediately if you require any further clarification.

Free phone 0800 400 772 for all enquiries.



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Site selection.

When finding the best location for your swim spa, think safety first:

Never position a spa, swim spa, or any other type of pool near overhead cables or power lines.

Make sure that if the swim spa is to be positioned near a slope, dip, trough or below ground level, there is adequate drainage for any ground water to run off.

Damage caused by flooding is not covered under warranty.

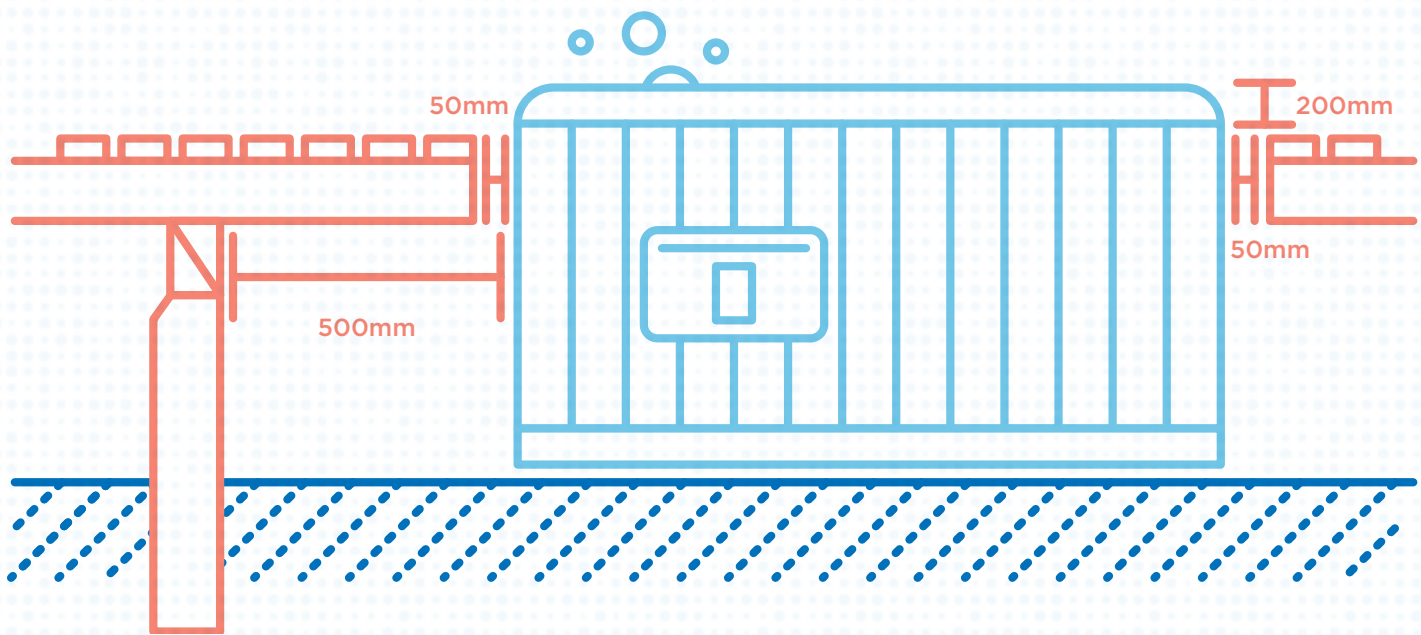
If you are building a deck around the swim spa, sinking it slightly, or placing it against a wall, ensure easy access is provided to the service panel. This is almost always on the same side of the swim spa as the touch pad.

You must ensure that it is possible to access all sides of the swim spa for maintenance if required. At least 500mm is required on all sides. Proper planning will enhance the enjoyment of your spa experience and protect your privacy.

Do you need quick and easy access? If so, placing swim spas close to the house or changing room is ideal.

Do you have a view to admire from the swim spa? If so; consider how the swim spa can be best rotated so the seating faces the view without obstructing the service panel.

Swim spas should also be 200mm proud of the top of any deck to allow for the cover to be clipped to the side of the spa.



NOTE: Any exceptions to the above should be approved by Vortex Spas.

Power requirements.

For most, the reason for buying a swim spa is to be able to swim in it!

As such, swim spas have 2 or more large pumps, that drive the swim stream.

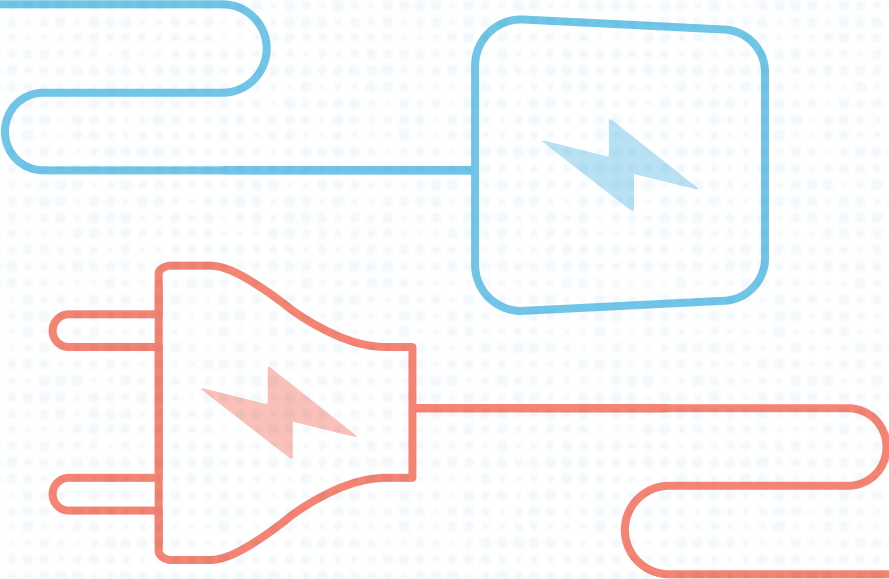
When not in use, swim spas use surprisingly little power, however with the swim pumps on, this power draw increases and so adequate power supply is crucial to get the most from your swim spa.

Beside is a table outlining the maximum and minimum power requirements for each model of swim spa.

Please note that if you do not have the maximum power requirement available, the swim spa will be set up so that the heater will turn down when one or more of the swim pumps are activated. Within Australia and New Zealand, these will be single-phase power supplies, however, the swim spa can be configured to use either 2 or 3 phases if required.

Model	Maximum Required	Minimum Required
Single zone Plunge models	15 amps	15 amps
Single zone Pro models	32 amps	32 amps
Single zone Extreme models	45 amps	45 amps
Hydrozone Pro models	32 amps + 15 amps	32 amps + 15 amps
Hydrozone Extreme models	45 amps + 15 amp	45 amps + 15 amp

NOTE: The above assumes that a heat pump is fitted.



Electrical installation.

Please use a qualified electrician.

In the comments section of your invoice, the salesperson should have noted the amount of amps that your spa requires to operate. If you cannot see this note, please call your salesperson as soon as possible. This information is what you need to provide to your electrician for them to quote correctly.

Please only use a qualified electrician who will be able to recommend the safest and most efficient installation method.

10 and 15 amp spas.

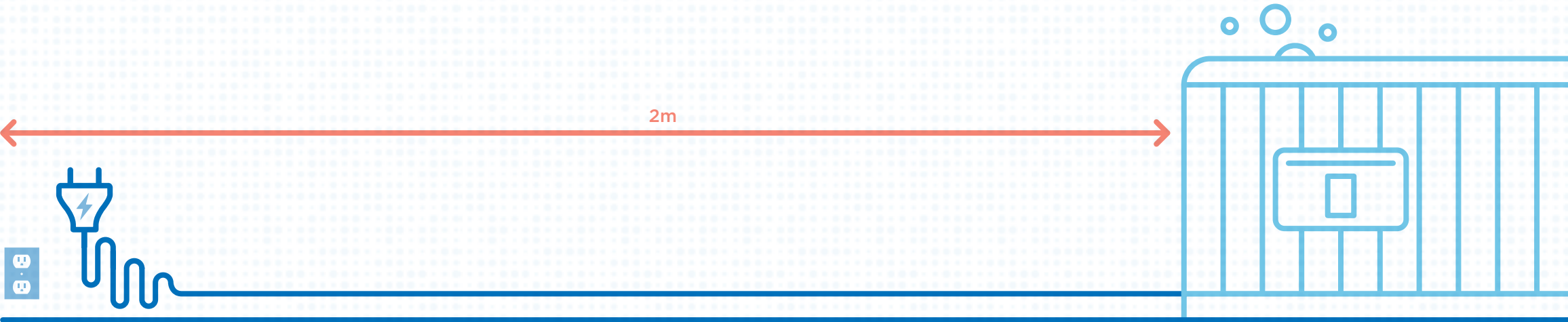
Spas that are listed as 10 or 15 amps will require an outdoor waterproof power point with an earth leakage protection device (unless there is one already fitted to your switch board). There is a power lead on these spas that is approximately 3 metres long and located under the touch pad. This means for the cord to reach the power point you need to position the touch pad side of the spa to within 2m of the power point.

(Please check with your electrician but in most cases you cannot have the power point closer than 1m to the spa for safety reasons).

Spas requiring 32 amps or more.

If your spa is 32 amps or more, it will need to be hard wired by your electrician. This typically means that your electrician is required to make two trips: the first to do initial connection work and the second to connect the wires after delivery and before handover.

VIP deliveries require the electrician on site on the day of delivery before filling and handover can commence.



Wire placement.

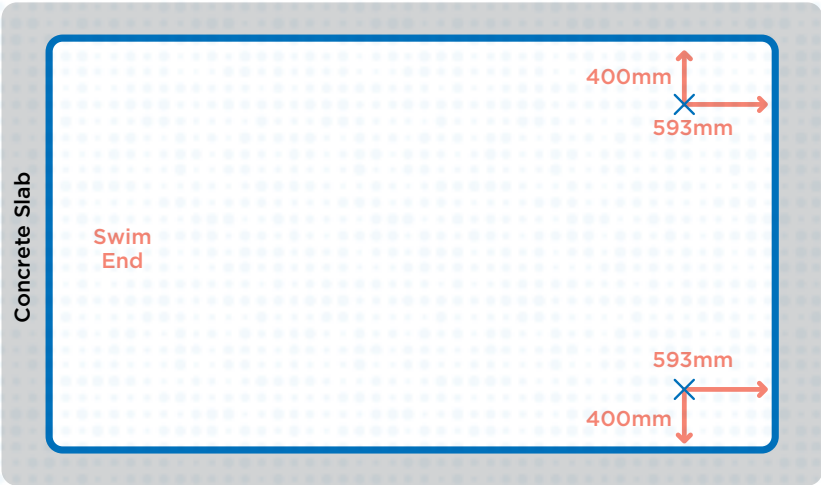
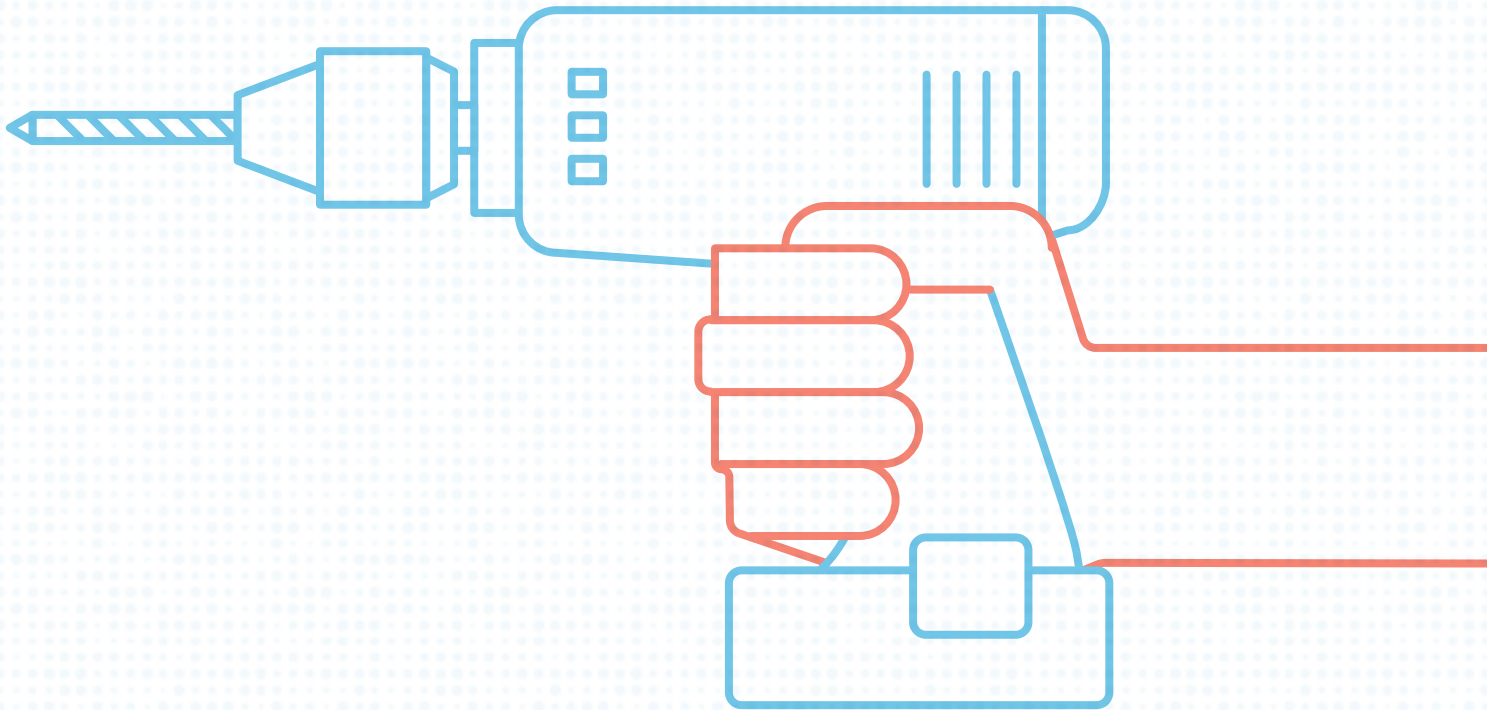
When hardwiring the spa the electrician will typically drill a hole in the cabinet at the spa end of the swim spa and run conduit to connect the spa electrics.

Please discuss where you would like this hole drilled with your electrician when he arrives to connect the spa.

Alternatively you if you are preparing a new base for your spa or installing onto a deck and would like to conceal the power please follow these instructions:

Mark out where your spa will sit on the base with the correct dimensions. Measure in 593mm from the end and 400mm down/up from the side where you want the power to come from. You can have your electrician run conduit before the base is prepared so that when the spa is delivered the power will come from underneath the spa and be concealed. When the delivery person arrives, you will need to advise them of the power location and that they will need to prepare a hole in the base to accommodate the cable.

NOTE: Most local authorities insist that your swim spa is separated from it's isolation switch by at least 1m. Your electrician should be aware of this and should be consulted prior to settling on the exact position of your swim spa.



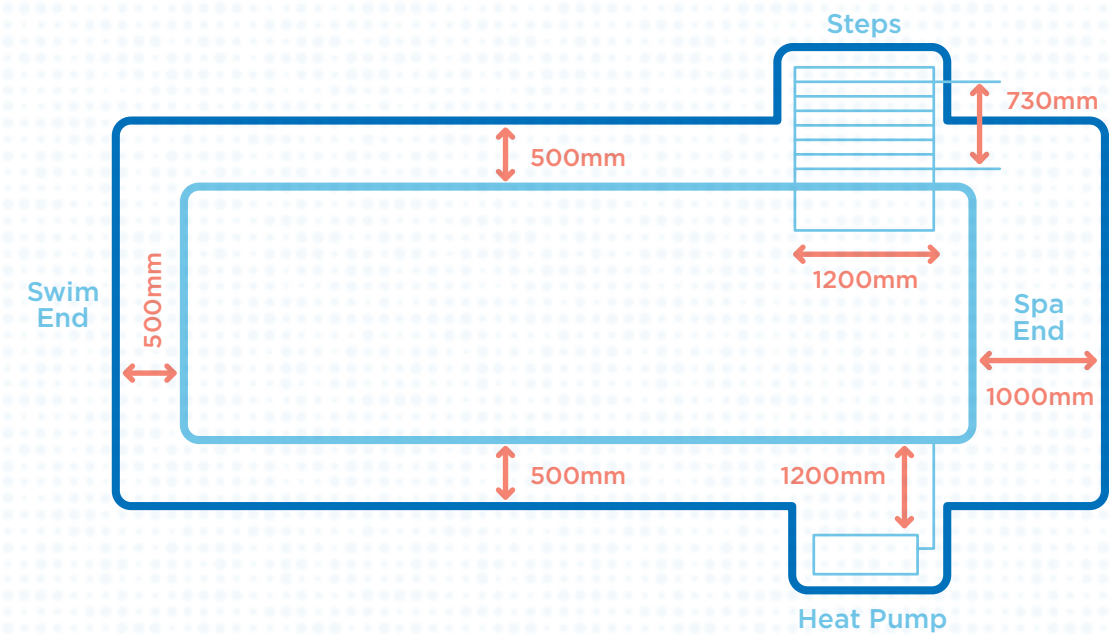
WIRE PLACEMENT OPTIONS

Concrete slab.

When a swim spa is full, it often weighs more than 9 tonnes. As such, it needs a very firm base.

We recommend 150mm of reinforced concrete. In terms of the overall dimension, we recommend at least 600mm extra on each side of the swim spa meaning that the minimum pad size should be 1200mm larger than the swim spa itself. This extra is not necessarily required if the swim spa is being decked around or sunken below ground level.

If you wish to use swim spa steps to access the spa, these should be placed at the spa end so that you can step onto the spa seating to make access and egress easy. The swim spa steps measure 1200mm wide, 730mm deep and 795mm high so take this into account when planning your pad.



Typical concrete pad layout

Fencing requirements.

Whilst there is some variation from councils regarding fencing requirement or spas, you should assume that the council will want to see a fence of 1.2M around the swim spa.

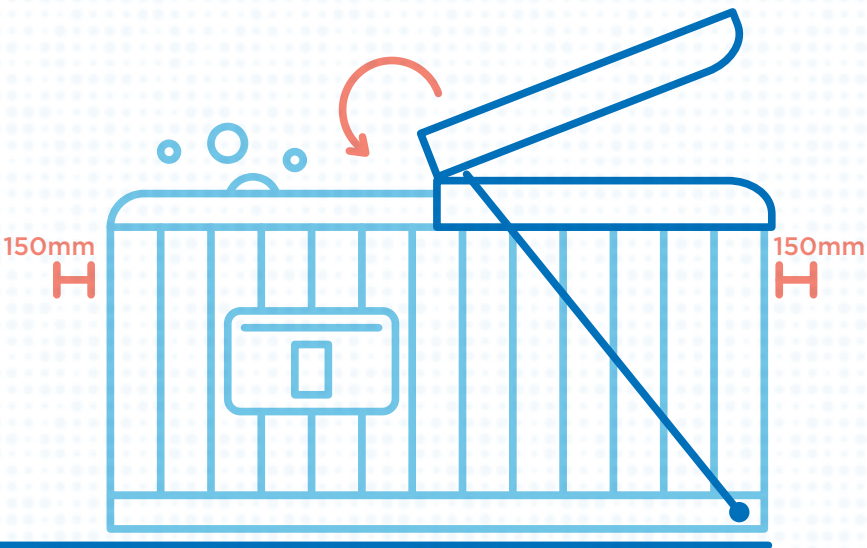
This can often be avoided if the swim spa is installed above ground, as swim spas are generally more than 1.2m high. However if this is done, the council will require that the steps are removable and there are not other items around the spa that can be used as a step. This includes heat pumps and heat pump plumbing.

As such, if you wish to avoid fencing your swim spa by leaving it completely above ground, the heat pump will need to be installed at least 1.2m away from the side of the swim spa.

Fencing requirements are the responsibility of the home owner.

Cover lifters.

If a cover lifter is to be fitted, allow 500mm for the lifter to fold back out of the way and 150mm each side for the lifter arms.



Delivery of your swim spa - Cranes and hiabs.

Due to the weight of your swim spa, it will be delivered using a 'hiab' crane, mounted on the delivery truck, or a larger separate crane.

The maximum reach of a truck mounted 'hiab' crane is usually no more than 12 metres but this will depend on where the swim spa is positioned in relation to the orientation of the truck. I.e. a hiab crane may be able to place the swim spa 12m from the rear of the truck, but not necessarily off the side.

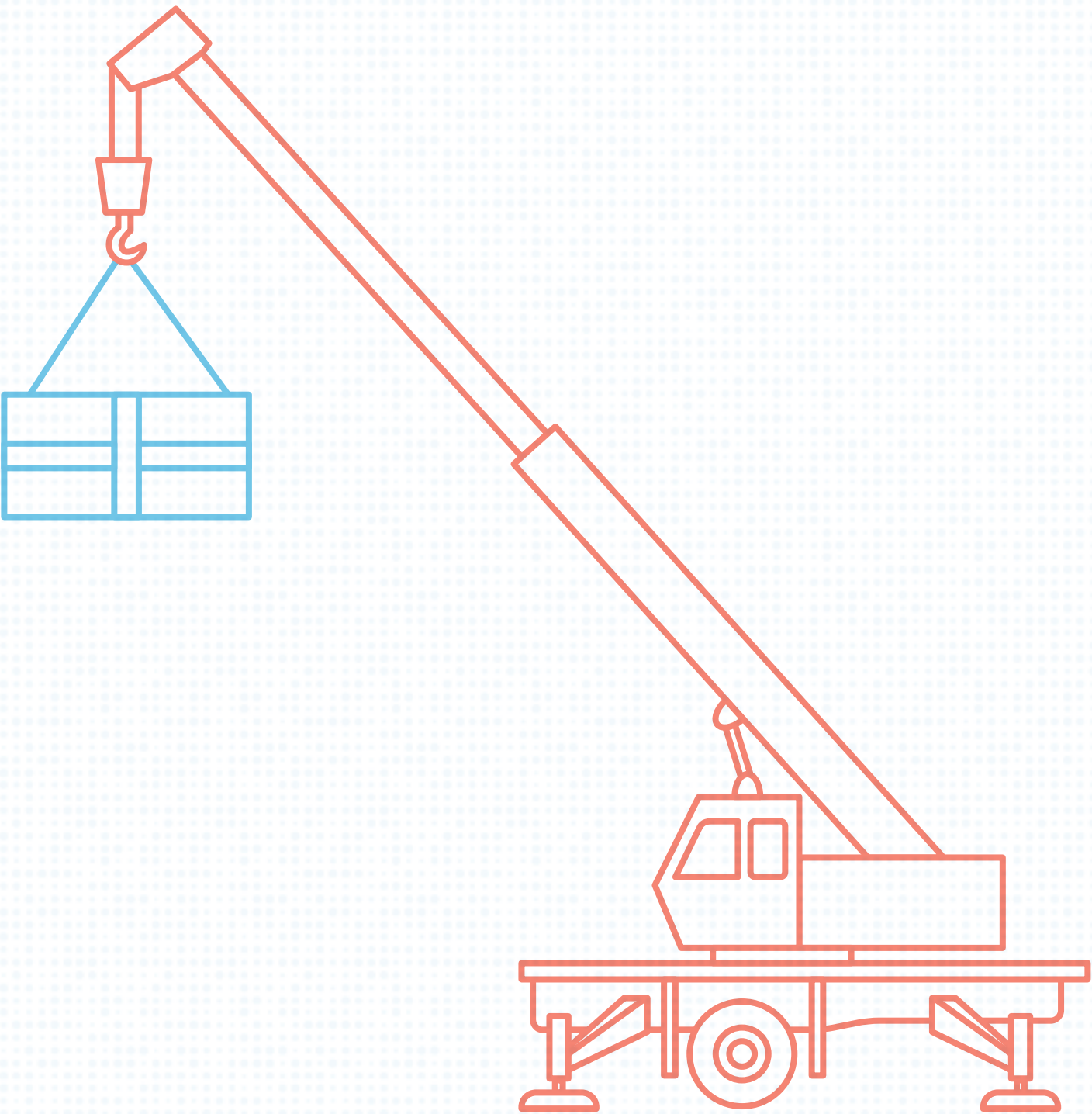
Bare in mind that trucks with hiab cranes are usually quite large and so consideration needs to be made as to whether they will fit up a normal driveway.

Stand alone, truck mounted cranes will have a much larger reach – up to 44m. However these cranes are often very wide and very heavy with many not being able to drive on a domestic driveway. If they need to be positioned at the street, then often a traffic control plan will be required. It is very unlikely that a crane of this type will be able to operate from grass or 'off road', but some all terrain cranes are available.

Whilst Spas can often be lifted without spreader bars, this is at the discretion of the crane company. We insist that these are used for lifting swim spas.

It is the sole responsibility of the crane company to ensure that the spa is moved without damage, and it is your responsibility to ensure that they are suitably insured for any damage occurring to either your spa or property. Vortex Spas or employees are not responsible for any damage to persons or owners while the spa is in the air or while the crane is operating.

Please note that it is virtually impossible to move a swim spa by hand. Once in position, it is there to stay and so it is vital that it is placed in it's final position whilst the crane or hiab truck is on site.

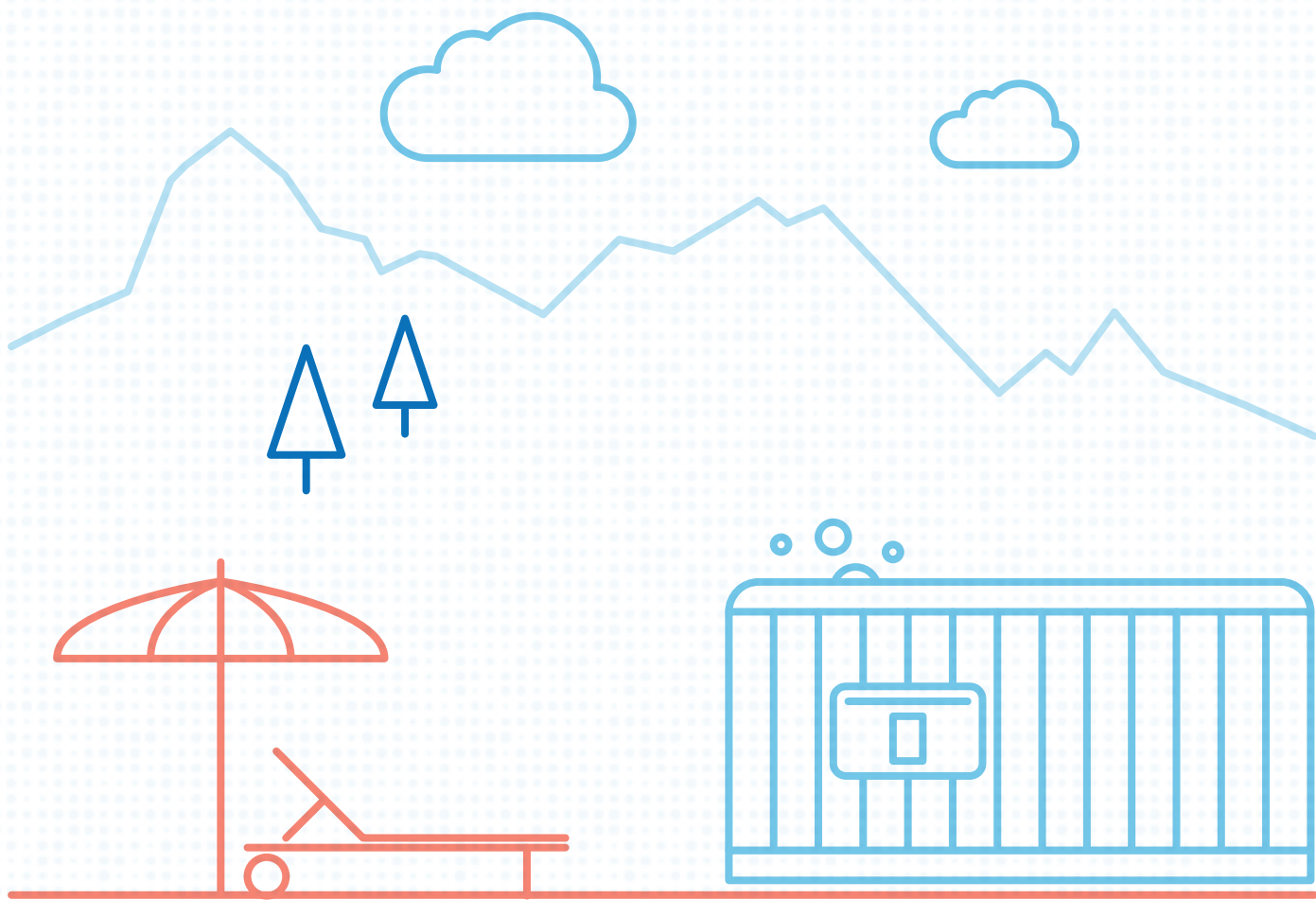


Above ground installations.

This is the most common and certainly the easiest method of installing a swim spa.

You simply lay a concrete pad as described above and crane the swim spa onto it. You then have a choice of either using the removable steps for access, thereby potentially eliminating the need for fencing, or building decking up to the swim spa as seen to the right.

NOTE: If you are decking up to the swim spa, the sides of the swim spa must still be accessible and most importantly, there must be access to the equipment bay at the spa seating end of the swim spa. This can be achieved using removable decking sections.



Installing your swim spa into the ground.

When excavating your hole, ensure that you allow an extra 500mm from each side of the swim spa and an extra 1000mm at the spa end for access to the equipment bay.

If a heat pump or pit drain is being installed below ground level, sufficient room must also be allowed for these items. As such, a swim spa measuring 4m x 2.3m would require a hole that is 5.5m x 3.3m.

The lockable hard cover requires a 200mm clearance from the top of the spa to the lock fittings on the spa for correct locking.



Typical below ground layout for a swim spa

Installing your swim spa into the ground.



1. The walls then have to be retained, this can be done with timber, bricks or concrete.



2. Drainage of the pit needs to be fitted. A full length drain should be used that either gravity drains to the outside of the pit, or drains into a sump with a automatic submersible pump fitted.



5. If you do not have the option of gravity draining the pit, a sump pump should be installed. These are a very reliable and relatively inexpensive solution.

Your pit is now ready for the swim spa to be installed.



6. Your swim spa can now be craned into position.



3. The base needs to be concreted–make sure of your heights and what height you want the swim spa to finish so as to sit flush in relation to any decking.



4. (Optional) Using a liquid filler, fill all the gaps in between the timbers and then paint using a black seal waterproof paint .This will stop any see page from the dirt in to the pit.



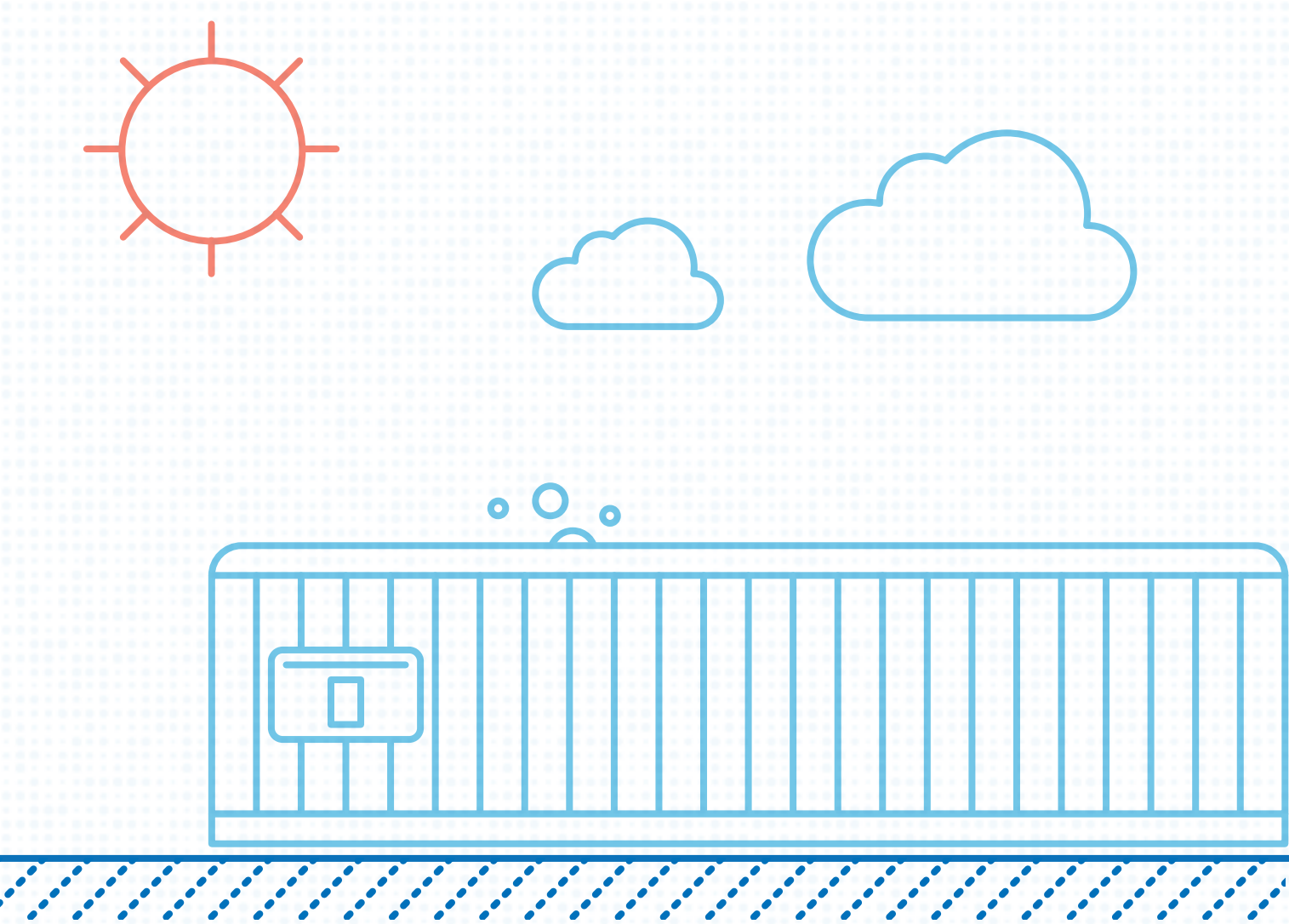
7. Once the swim spa is in position, you can complete the decking up to the spa.

NOTE: It is important that access is available to all sides and most importantly, the equipment bay of your swim spa. This can be achieved using removable decking panels. Failure to take this into account could lead to significant costs if your swim spa needs to be serviced in the future.

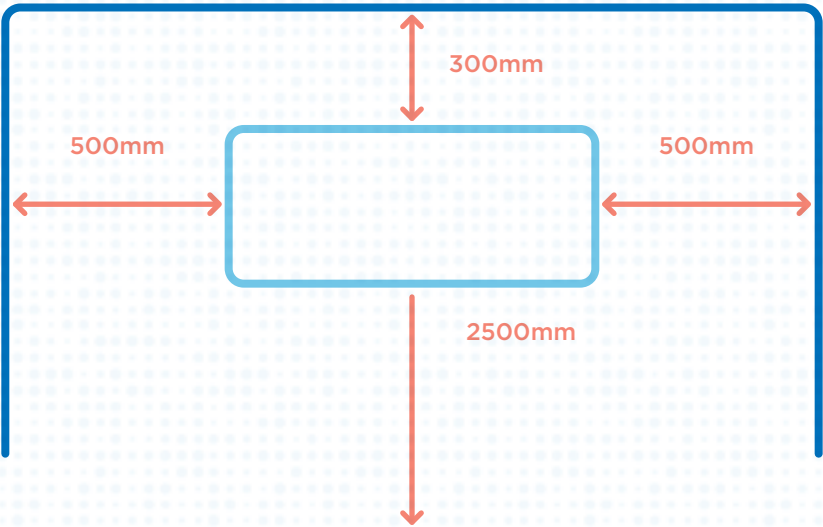
For the lockable hard cover to be locked correctly a 100mm clearance from the top of the spa to the lock fittings is required.

Heat pump placement and installation.

Heat pumps are a fantastic method of reducing the heating cost of your swim spa. Separate detailed installation instructions are available for your swim spa if you have chosen this option, but following are a few considerations when selecting the placement of your heat pump:



- The 8.8kW heat pump measures 955mm wide x 305mm wide x 550mm high.
- The heat pump is connected to your swim spa with 2 x 40mm plumbing pipes, a power supply (the heat pump takes its power from the spa's controller) and a data cable. These enter the side of the swim spa via holes that are cut in the swim spa's cabinet by the installer
- The heat pump must be at least 1.2m from the edge of the swim spa but no more than 3m away
- The heat pump should be installed at the same level as the base of the swim spa. If your swim spa is being sunk into a pit, then the heat pump should be installed in the pit with its back side 300mm off the edge of the pit, and the front side facing across the front side of the swim spa to ensure it has adequate air flow.
- The heat pump must sit on either a concrete base, or well laid concrete paving stones. The most common solution is to pour a pad extension for the heat pump when the main pad is poured
- The heat pump moves a lot of air and so both the back and front of the heat pump must be completely unobstructed. The manufacturer recommends 300mm at the back, 500mm each side and 2.5m to the front of the unit.
- The heat pump is very quiet (49dB), but you should avoid placing your heat pump outside a bedroom window for example.
- If you wish to avoid fencing you spa, the heat pumps plumbing should be fitted low to the ground so as not to be used as a step.
- Heat pumps should be secured to the concrete pad using dynabolts or similar.

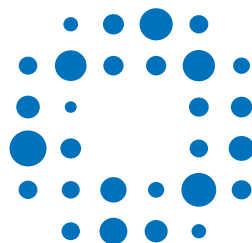


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Vortex Spas

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